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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/899,679	07/05/2001	David Wu	71795/10728	2675
23380	7590	11/01/2004	EXAMINER	
TUCKER, ELLIS & WEST LLP 1150 HUNTINGTON BUILDING 925 EUCLID AVENUE CLEVELAND, OH 44115-1475			HA, DAC V	
			ART UNIT	PAPER NUMBER
			2634	

DATE MAILED: 11/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/899,679

Applicant(s) **W**

WU ET AL.

Examiner

Dac V. Ha

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 July 2001.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-47 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. **Claims 1-42** are objected to because of the following informalities:

Claim 1:

Line 5, "said output module" should be changed to "said at least an output module".

Lines 6-7, "said output module" should be changed to "said at least an output module".

Claim 4:

Line 2, "LVDS" should be changed to "Low Voltage Differential Signal (LVDS)".

Claim 6:

Line 1, "said output module" should be changed to "said at least an output module".

Claim 22:

Line 5, "said output module" should be changed to "said at least an output module".

Line 6, "said output module" should be changed to "said at least an output module".

Claim 24:

Line 1, "Claim 24" should be changed to "Claim 23".

Claim 25:

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Line 2, "LVDS" should be changed to "Low Voltage Differential Signal (LVDS)".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 1, 2, 22, 23** are rejected under 35 U.S.C. 102(e) as being anticipated by Booth et al. (US 6,516,352) (hereafter Booth).

Regarding claim 1, Booth discloses the claimed subject matter "providing at least an output module for transmitting information and an input module for receiving said information; and configuring said output module and said input module according to communication parameters of a predetermined type of physical interface to which said output module and said input module interface such that communication of said information is facilitated therebetween" including providing input/output through combination of elements 420/430 and 420/440 (inherently, there should be another interface card for communicating with card 212); communication through the input/output is establish via the "predetermined interface type" (element 412) in

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accordance to the "communication parameters" from elements 410 and 414 (col. 6, lines 30-48; col. 12, lines 10-49).

Regarding claim 2, Booth further discloses "wherein said information in the providing step is communicated with a type of said physical interface, which is an 8B/10B device" in col. 4, line 60.

Regarding claim 3, Booth further discloses "wherein a function mapping register is utilized during the configuring step to provide control words in accordance with said communication parameters of said predetermined type of physical interface" in col. 15, lines 10-18.

Regarding claims 22-24, see claims 1-3 above, respectively.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 4-21, 25-47** are rejected under 35 U.S.C. 103(a) as being unpatentable over Booth in view of Ng (US 6,388,591).

Regarding claim 4, Booth discloses all the claimed subject matter in claim 4, as stated above, except for the claimed subject matter "wherein said information in the providing step is communicated with a type of said physical interface, which is an LVDS device". Ng, in the same field of endeavor, discloses utilization LVDS would result in

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reduced power consumption (col. 2, lines 14-24). Therefore, the claimed subject matter wherein said information in the providing step is communicated with a type of said physical interface, which is an LVDS device" would have been obvious to one skilled in the art on the basis of Booth and Ng.

Regarding claim 5, Ng. also suggests the teaching of the claimed subject matter "wherein a mapping function is not required, and said information is encoded and input directly to said physical interface" in col. 1, lines 43-50.

Regarding claims 25-26, see claims 4-5 above.

Regarding claims 6-21, 27-42, these claimed subject matter are rather design specific and would have been realized by one skilled in the art on the basis of Booth and Ng.

Regarding claim 43, see claim 7 above.

Regarding claim 44-47, see claims 2-4 above.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Azizoglu et al. (US 6,430,201) disclose Method And Apparatus For Transporting Gigabit Ethernet And Fiber Channel Signals In Wavelength-Division Multiplexed Systems.

Allen, Jr. et al. (US 6,404,752) disclose Network Swith Using Network Processor And Methods.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dac V. Ha whose telephone number is 571-273-3040. The examiner can normally be reached on 5/4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 571-272-3056. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in dark ink, appearing to read 'Dac V. Ha', is written over a horizontal line.

Dac V. Ha
Examiner
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